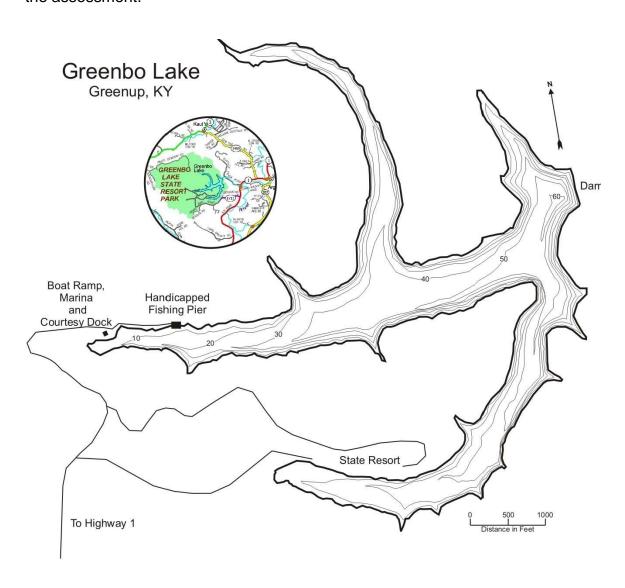
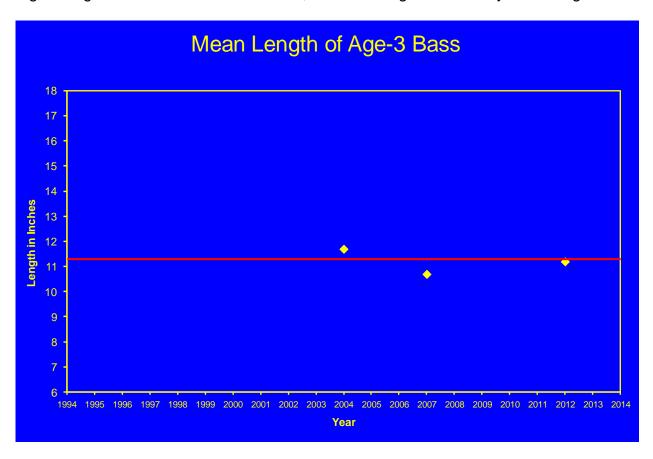
#### **Greenbo Lake Bass Assessment 2013**

Greenbo Lake is a 181 acre multipurpose reservoir located at Greenbo Lake State Park in Greenup County, where anglers enjoy fishing for largemouth bass, bluegill, redear sunfish, channel catfish and rainbow trout. The following graphs show trends and rankings for each of the five population parameters used for the largemouth bass assessment. Please see "Understanding the Largemouth Bass Assessment" article for an explanation of how the assessment works. Please note the minimum size limit for largemouth bass on this lake is 12.0 inches. In 2002, the water level was lowered to accommodate repairs to the dam which made sampling efforts impossible. Therefore data from this year is not included in the assessment.



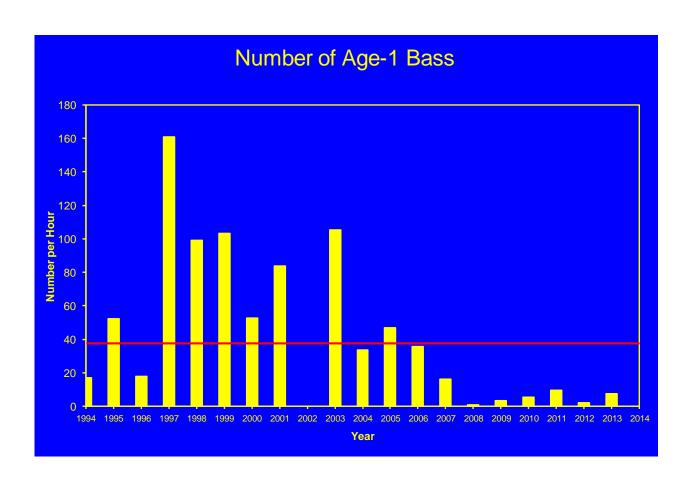
# Parameter 1 – Length at age-3 (growth rate)

At Greenbo Lake, the length of an age-3 largemouth bass has averaged 11.3 inches since 1993 (represented by the red line). When compared to other lakes of similar size, this is considered to be good growth for largemouth bass. Over the past 12 years, age-3 length has been relatively stable ranging from 10.7-11.7 inches. Growth rates are generally related to factors such as population density, food resources, lake fertility and weather patterns. The last time growth rates were determined was in 2012 and the average length of age-3 largemouth bass was 11.2 inches, which was right on the 20 year average.



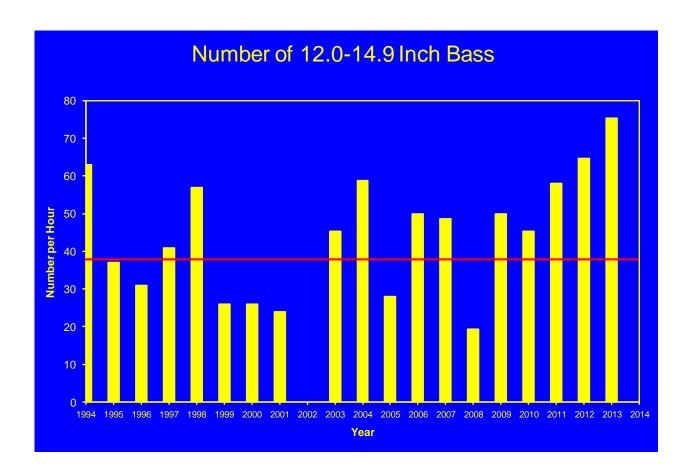
### Parameter 2 – Numbers of age-1 bass (how good the spawn was)

KDFWR looks at the electrofishing catch rate of age-1 largemouth bass to assess the success of the spawn which occurred in the previous year. This is an important parameter because the number of age-1 bass produced represents how good the fishing will be once these fish grow large enough for anglers to catch. At Greenbo Lake, age-1 largemouth bass catch rates have averaged 38.48 fish/hour (f/h) of electrofishing since 1990. When compared to other lakes of similar size, this is considered to be a fair age-1 catch rate. As a result of poor spawns in 2007, 2008 and 2010, KDFWR stocked 925, 2,715, and 2,724 fingerling largemouth bass, respectively, to help offset any future negative effects of these poor spawns. Though numbers of age-1 fish were low during 2013 spring sampling, sufficient numbers of young-of-year fish were collected in the fall to not warrant an additional stocking of bass. At present, anglers should not be alarmed when viewing low numbers of age-1 bass collected from 2007-2013 as the numbers of 12.0-14.9 inch bass continue to increase (see following graph).



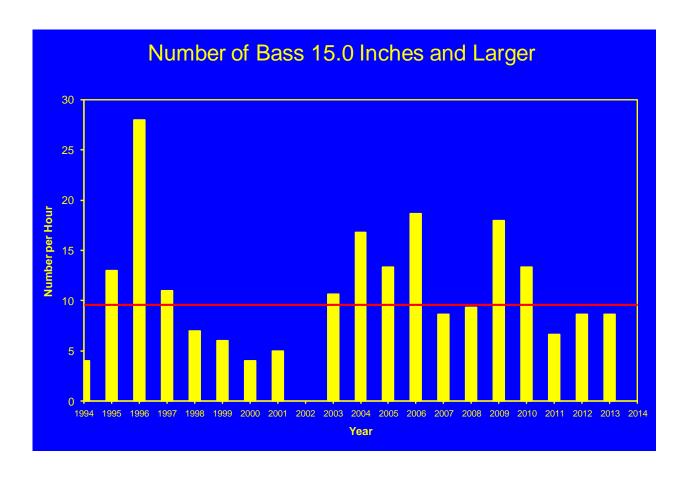
### Parameter 3 - Number of 12.0-14.9 inch bass

The electrofishing catch of 12.0-14.9 inch largemouth bass has averaged 38.30 f/h over the last 24 years, which gives Greenbo Lake a good rating when compared to other lakes of similar size. Since 2010 the catch rates of fish in this group have been increasing steadily to a level in 2013 that is the highest since 1990 and produces an average that would be considered excellent. Overall, the catch rates of fish in the 12.0 – 14.9 inch range have been excellent, only falling below the average catch twice in the last 10 years. These numbers should translate into continued opportunities to catch larger fish for several years to come.



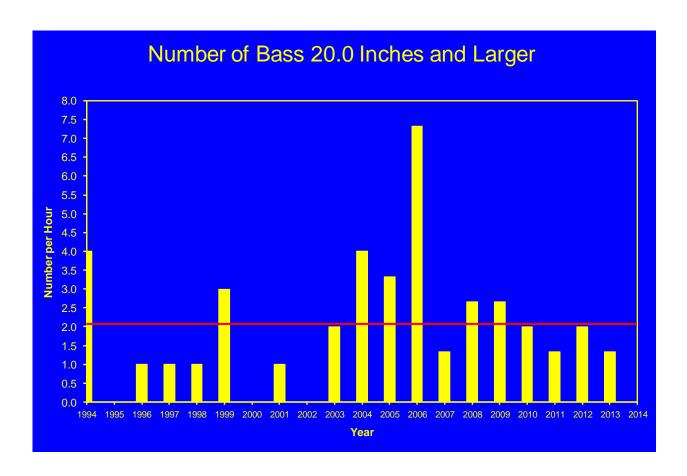
# Parameter 4 – Numbers of 15.0 inch and larger bass

The catch rate of 15.0 inch and larger largemouth bass at Greenbo Lake has averaged 9.73 f/h since 1990. As compared to other lakes, this is a fair catch rate for this size group. Since 2003 these values have ranged from 8.67 f/h to 18.00 f/h. It could be assumed that with the increases in 12.0 – 14.9 inch fish in recent years that the numbers of fish over 15.0 inches will increase in the near future.



# Parameter 5 - Numbers of 20 inch and larger bass

The electrofishing catch of 20.0 inch and larger largemouth bass has averaged 2.05 f/h since 1990. This catch rate gives the lake a good rating when compared to other lakes of similar size. Catch rates varied greatly from 2006 (7.30 fish/hour – record high) to 2007 (1.30 fish/hour – slightly below average), but stabilized in 2008 and 2009. Since then the lake has met or been below the average for catch rates of this size fish. However, Greenbo Lake is still producing fish over 20.0 inches.



### Overall – Total Assessment Score (All five parameters added together)

Overall, the largemouth bass fishery at Greenbo Lake has averaged a good rating since 1990. That being said, The majority of total assessment values have fallen into the Fair category over the last 7 years and this drop is mainly due to below normal catch values for age-1 bass (Parameter 2) lowering the total assessment score. Based on the overall trends revealed by these assessments and other data, the largemouth bass fishery at Greenbo Lake should remain good for the immediate future and will continue to offer anglers a chance to catch trophy largemouth bass.

